

PRCMM-B
PROBE, CURRENT

1. GENERAL. This procurement requires a passive, clamp-on, ac current probe for use with an oscilloscope.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. OPERATIONAL REQUIREMENTS. The equipment shall provide the capability of measuring ac current within the ranges and accuracies detailed below when connected to an oscilloscope with a compatible bandwidth and 1 megohm input impedance.

3.1 Measurement range. 2 mA to 15A peak. Sensitivity: Selectable between 2 mA/mV and 10 mA/mV.

3.2 Bandwidth. 120 Hz to 60 MHz. Rise Time: 5.8 ns.

3.3 Accuracy. $\pm 3\%$.

3.4 Maximum input. 250A peak, or an Ampere - μ s product of 500. Maximum dc input: 0.5A.

3.5 Physical characteristics.

3.5.1 Probe aperture. The probe shall be capable of enclosing cables up to but not exceeding 3.6 mm (0.14 in) in diameter.

3.5.2 Ground leads. One 130 mm (5 in) and one 75 mm (3 in) ground leads terminated with alligator clips shall be provided.

3.5.3 Cable length. The probe cable shall be 2.74m (9 ft) in length.

3.5.4 Cable connector. A male BNC type connector shall be provided for connection to an oscilloscope.

4. GENERAL REQUIREMENTS.

4.1 Power Source. The power source requirements are not invoked.

4.2 Weight. 1 kg (2.2 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.